#### DI9HA-01

# DTC P0710/38 Transmission Fluid Temperature Sensor Malfunction (ATF Temperature Sensor)

# **CIRCUIT DESCRIPTION**

The ATF temperature sensor converts fluid temperature into a resistance value which is input into the Engine and ECT ECU.

DTC No.	DTC Detecting Condition	Trouble Area
P0710/38	<ul> <li>Either (a) or (b) is detected for 0.5 sec. or more.</li> <li>(2-trip detection logic)</li> <li>(a) Temperature sensor resistance is less than 79 Ω</li> <li>(b) After the engine has been operating for 15 minutes or more, the resistance at the temp. sensor is more than 156 kΩ</li> </ul>	<ul> <li>Open or short in ATF temperature sensor</li> <li>ATF temperature sensor</li> <li>Engine and ECT ECU</li> </ul>

## WIRING DIAGRAM



### **INSPECTION PROCEDURE**

- 1
- Check ATF temperature sensor.



**PREPARATION:** 

- (a) Disconnect the solenoid wire connector.
- (b) Remove the oil pan.
- (c) Disconnect all solenoid valve connectors.
- (d) Disconnect the ATF temperature sensor.

#### CHECK:

Measure resistance between terminals 1 and 7of transmission wire connector at 25  $^\circ C$  (77  $^\circ F) and 110 <math display="inline">^\circ C$  (230  $^\circ F).$ 

<u>OK:</u>

### Resistance (Approx.): 25 °C (77 °F): 3.5 kΩ 110 °C (230 °F): 231 – 263 Ω

Replace the ATF temperature sensor (transmission wire) (See page AT–9).

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### 2 Measure resistance between terminals OIL and E1 of Engine and ECT ECU connector.



### **PREPARATION:**

- (a) Remove the Engine and ECT ECU hood.
- (b) Disconnect the connector of the Engine and ECT ECU.

#### CHECK:

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Measure resistance between terminals OIL and E1 of Engine and ECT ECU connector.

#### <u>OK:</u>

Resistance (Approx.): 25 °C (77 °F): 3.5 kΩ 110 °C (230 °F): 231 – 263 Ω

Repair or replace the harness or connector. (See page IN–34).



Check and replace the Engine and ECT ECU (See page IN-34).